

CROSS-REFERENCE TO RELATED APPLICATIONS

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This application is a continuation of, and claims priority to, U.S. Serial No. 08/951,552, filed October 16, 1997 (allowed), which claims priority to U.S. Serial No. 60/029,252, filed October 24, 1996, both of which are herein incorporated by reference in their entirety.

In the Claims:

Please cancel claims 2 through 35 without prejudice.

Please add new claims 36-53 as follows.

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36. A method of inhibiting replication of a respiratory syncytial virus in a respiratory cell, comprising delivering a nucleic acid molecule encoding α_1 antitrypsin to a population of cells, wherein the population comprises a respiratory cell that has been infected by a respiratory syncytial virus or that will be infected by a respiratory syncytial virus, wherein a cell in the population produces α_1 antitrypsin encoded by the nucleic acid molecule, thereby inhibiting replication of the respiratory syncytial virus in the respiratory cell.

37. The method of claim 36, wherein the nucleic acid molecule encoding α_1 antitrypsin is associated with a positively charged liposome.

38. The method of claim 37, wherein the positively charged liposome is LipofectinTM.

39. The method of claim 36, wherein the respiratory cell is a nasal mucosal cell or a lung epithelial cell.

40. The method of claim 36, wherein the α_1 antitrypsin is human α_1 antitrypsin.

41. The method of claim 36, wherein the nucleic acid molecule encoding α_1 antitrypsin is

a DNA molecule in operable association with a promoter.

~~42.~~ A method of reducing respiratory syncytial virus infectivity in a population of cells, comprising delivering a nucleic acid molecule encoding α_1 antitrypsin to a population of cells, wherein the population has been exposed to respiratory syncytial virus or will be exposed to respiratory syncytial virus, wherein a cell in the population produces α_1 antitrypsin encoded by the nucleic acid molecule, thereby reducing respiratory syncytial virus infectivity in a population of cells.

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43. The method of claim 42, wherein the nucleic acid molecule encoding α_1 antitrypsin is associated with a positively charged liposome.

44. The method of claim 43, wherein the positively charged liposome is Lipofectin™.

45. The method of claim 43, wherein the respiratory cell is a nasal mucosal cell or a lung epithelial cell.

46. The method of claim 43, wherein the α_1 antitrypsin is human α_1 antitrypsin.

47. The method of claim 43, wherein the nucleic acid molecule encoding α_1 antitrypsin is a DNA molecule in operable association with a promoter.

~~48.~~ A method of inhibiting infection of a respiratory cell by a respiratory syncytial virus, comprising delivering a nucleic acid molecule encoding α_1 antitrypsin to a population of cells that includes the respiratory cell, wherein the respiratory cell has been exposed to respiratory syncytial virus or will be exposed to respiratory syncytial virus, wherein a cell in the population produces α_1 antitrypsin encoded by the nucleic acid molecule, thereby inhibiting infection of the

respiratory cell by the respiratory syncytial virus.

49. The method of claim 48, wherein the nucleic acid molecule encoding α_1 antitrypsin is associated with a positively charged liposome.

50. The method of claim 49, wherein the positively charged liposome is Lipofectin™.

51. The method of claim 48, wherein the respiratory cell is a nasal mucosal cell or a lung epithelial cell.

52. The method of claim 48, wherein the α_1 antitrypsin is human α_1 antitrypsin.

53. The method of claim 48, wherein the nucleic acid molecule encoding α_1 antitrypsin is a DNA molecule in operable association with a promoter.